
CANCER FACTS

National Cancer Institute • National Institutes of Health
Department of Health and Human Services

Vasectomy and Cancer Risk

Some studies have raised questions about a possible relationship between vasectomy (an operation to cut or tie off the two tubes that carry sperm out of the testicles) and the risk of developing cancer, particularly prostate and testicular cancer. Such a relationship, if proven, would be of importance because about 1 in 6 men over age 35 in the United States has had a vasectomy.

Prostate Cancer

Prostate cancer is the most common cancer in American men and the second leading cause of cancer death, after lung cancer. In March 1993, the National Institute of Child Health and Human Development convened a conference, cosponsored by the National Cancer Institute (NCI) and the National Institute of Diabetes and Digestive and Kidney Diseases, to clarify the available evidence on the relationship between vasectomy and prostate cancer. Scientists reviewed and carefully weighed all of the data available at that time, including results from published and unpublished studies. They determined that the results of research on the



association between vasectomy and prostate cancer were not consistent. In addition, the scientists could not find any convincing biological explanation for a link between vasectomy and an increased risk of prostate cancer. Based on these findings, the expert panel concluded that even if having a vasectomy can increase a man's risk of developing prostate cancer, the increase in risk is relatively small.

Since the conference in 1993, more studies investigating the relationship between vasectomy and prostate cancer have been conducted. Although the majority of these studies have upheld the conclusions made at the conference, a few studies have reported a link between vasectomy and prostate cancer. It is possible that other factors, including chance, may be responsible for the increased prostate cancer risk seen in these studies. Scientists expect that additional research will clarify this issue.

Several studies looking at a possible connection between vasectomy and prostate cancer are currently under way. The largest of these studies is the NCI's Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, which began in 1992. The PLCO Trial is evaluating screening procedures for prostate cancer and will prospectively examine potential risk factors, including vasectomy, associated with prostate cancer. The PLCO is a long-term study; results are expected by 2015.

Testicular Cancer

Testicular cancer is much less common than prostate cancer, accounting for only 1 percent of cancers in American men. This type of cancer is most often found in men ages 15 to 35. A few studies have suggested a link between vasectomy and an increased risk of testicular cancer, but it is possible that the increase in cases of testicular cancer seen in these

studies may be due to factors other than vasectomy. It is also possible that the vasectomy procedure increases the rate at which an existing, but undetected, testicular cancer will progress. At this time, it is believed that there is either no association or a weak association between vasectomy and testicular cancer, but more research is needed before definitive conclusions can be made.

Men concerned about prostate cancer or testicular cancer should talk to their doctor about the symptoms to watch for and an appropriate schedule for checkups.

References

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Sources of National Cancer Institute Information

Cancer Information Service

Toll-free: 1–800–4–CANCER (1–800–422–6237)

TTY (for deaf and hard of hearing callers): 1–800–332–8615

NCI Online

Internet

Use <http://cancer.gov> to reach the NCI's Web site.

LiveHelp

Cancer Information Specialists offer online assistance through the *LiveHelp* link on the NCI's Web site.

This fact sheet was reviewed on 2/4/02